ABSTRACT

A holographic memory reproduction apparatus which makes a wavelength of a reproducing laser beam coincident with a 5 wavelength of a laser beam used for holographic recording when information is reproduced from a holographic recording medium. In the holographic memory reproduction apparatus 10, a temperature adjustment device 26 is attached to a semiconductor laser 12. On the holographic recording medium 16, 10 wavelength information of the laser beam used for recording is recorded as a wavelength address hologram 28. When the information is reproduced, the temperature adjustment device 26 is controlled by a wavelength control device 24 in accordance with a signal beam from the wavelength address hologram 28, thereby making an oscillation peak wavelength of 15 the semiconductor laser 12 coincident with the wavelength of the laser beam used for recording.